

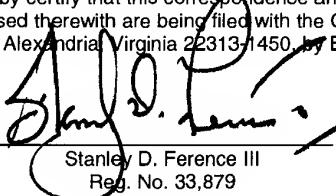
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of : Srinivasan et al.  
Serial No. : 09/805,336 Examiner : J. Janvier  
Filed : March 13, 2001 Art Unit : 3688  
For : METHOD AND SYSTEM FOR CREATING AND  
ADMINISTERING INTERNET MARKETING  
PROMOTIONS

July 6, 2009

**AMENDED APPEAL BRIEF**

I hereby certify that this correspondence and any documents referred to as enclosed therewith are being filed with the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, by EFS Web on July 6, 2009.

  
\_\_\_\_\_  
Stanley D. Ference III  
Reg. No. 33,879

\_\_\_\_\_  
July 6, 2009  
Date of Signature

**TABLE OF CONTENTS**

IDENTIFICATION PAGE.....	1
TABLE OF CONTENTS .....	2
REAL PARTY IN INTEREST .....	3
RELATED APPEALS AND INTERFERENCES .....	4
STATUS OF CLAIMS.....	5
STATUS OF AMENDMENTS .....	6
SUMMARY OF CLAIMED SUBJECT MATTER.....	7
GROUND OF REJECTION TO BE REVIEWED ON APPEAL .....	12
ARGUMENT .....	13
CONCLUSION .....	29
CLAIMS APPENDIX .....	30
EVIDENCE APPENDIX .....	35
RELATED PROCEEDINGS APPENDIX.....	36

**REAL PARTY IN INTEREST**

The real party in interest is Intellions Inc., the assignee of record.

**RELATED APPEALS AND INTERFERENCES**

None.

**STATUS OF THE CLAIMS**

Claims 1-21 are rejected and are being appealed.

**STATUS OF AMENDMENTS**

No amendments have been made to the claims subsequent to the Examiner's final rejection in the Office Action dated July 1, 2008. All previous amendments have been entered.

**SUMMARY OF THE CLAIMED SUBJECT MATTER**

Of the claims involved in the present appeal, claims 1 and 18 are independent claims, while remaining claims 2-17 and 19-21 are dependent.

Independent claims 1 and 18 are directed to methods for “automatically generating marketing promotions for Internet websites based on real-time data obtained through controlled short-term experiments that determine market sensitivity.” *Specification*, pp. 2, lines 11-13 (paragraph [0003]).

**Independent claim 1**

Independent claim 1 is directed to an embodiment of the invention described generally by the specification in connection with Figures 3-4, reference characters 360; 301; 305; 310; 312; 320; 325; 330; 340; 345; 365; 335; 315; 370; 410; 430; 460; 480; and 485. As stated in the specification, “[t]he...method...of the present invention utilize[s] limited sampling to determine real-time market sensitivity. This sampling provides data that can be used to create a real-time model that is analyzed to determine optimal values for many key market variables, such as price, promotions...” *Specification* at pp. 7, lines 5-8 (¶ [0035]). “The method...enables a company using the system to offer different promotions to different customers...to segment the market, and Internet merchants using the system...may be informed of an optimal promotion for each market segment.” *Id* at pp. 7, lines 11-15 (¶ [0036]).

The specification at pp. 16, line 21-pp. 20, line 21 (¶ [0080]-¶ [0096]), taken in conjunction with Fig. 4, illustrates an overall procedure for determining an optimal

dynamic promotion scheme. Briefly stated, “[a]s shown in step 410, an employee for the Internet merchant first inputs data that is used by the inventive system to determine a sampling and optimization strategy.” *Id* at pp. 16, lines 22-24 (¶ [0080]). This input data, discussed further in the specification at pp. 16, line 26-pp. 19, line 3 (¶¶ [0081]-[0088]), determines the type of experiment that will be conducted and may include, *inter alia*, a time and a sample size. *Id* at pp. 18, lines 2-4 (¶ [0085]) (stating “[w]hen the pricing experiment is conducted continuously or at varying closely spaced intervals, the prices match the instantaneous price customers are willing to pay”); see also pp. 18, lines 11-12 (¶ [0086]) (stating “[a] random fraction of the population is the sample for the experiment”). Thus, the invention is configured to receive various inputs from managers. Fig. 4, item 410.

“[T]he dynamic sampling engine 430 randomly samples potential customers according to the parameters defined at 410.” *Id* at pp. 19, lines 4-5 (¶ [0089]). The experiment includes “...the Webserver distribut[ing] webpages 435 with the different promotions to the different customers in proportion to the quantities and for the period of time determined in step 410.” *Id* at pp. 19, lines 6-8 (¶ [0089]). Accordingly, “[t]hese continuous dynamic experiments are used to measure the effectiveness of the promotions...” *Id* at pp. 19, lines 8-9 (¶ [0089]). “Experimentation utilizing the dynamic sampling engine 430 may be repeated...until the experimentation becomes, practically speaking, continuous. Dynamic optimization, therefore, is a result of continuous experimentation.” *Id* at pp. 19, lines 13-17 (¶ [0090]); see also pp. 18, lines 2-4 (¶ [0085]).



“Once the absolute number of customers, or the time period determined in step 410, has been sampled, the data gathered by the dynamic sampling engine 430 is used to compute the promotion point that maximizes the economic variable(s) of interest.” *Id* at pp. 20, lines 3-6 (¶ [0093]). “The responses to various promotions are presented to the user at 460. In addition, the optimal promotion...is displayed.” *Id* at pp. 20, lines 19-21 (¶ [0096]). Once the experiment has determined an optimal promotion, the Internet merchant may choose to employ it or not, as explained in the specification. *Id* at pp. at pp. 21, lines 14-17 (¶ [0101]) (stating “[t]he Internet merchant configures the system to automatically change the price of the promotion if the optimal promotion determined by the system increases profit by 5% or more”).

#### **Independent claim 18**

Independent claim 18 is directed to an embodiment of the invention described generally by the specification in connection with Figures 3-4, reference characters 360; 301; 305; 310; 312; 320; 325; 330; 340; 345; 365; 335; 315; 370; 410; 430; 460; 480; and 485. As stated in the specification, “[t]he...method...of the present invention utilize[s] limited sampling to determine real-time market sensitivity. This sampling provides data that can be used to create a real-time model that is analyzed to determine optimal values for many key market variables, such as price, promotions...” *Specification* at pp. 7, lines 5-8 (¶ [0035]). “The method...enables a company using the system to offer different promotions to different customers...to segment the market, and Internet merchants using the system...may be informed of an optimal promotion for each market segment.” *Id* at pp. 7, lines 11-15 (¶ [0036]).

The specification at pp. 16, line 21-pp. 20, line 21 (§§ [0080]-§ [0096]), taken in conjunction with Fig. 4, illustrates an overall procedure for determining an optimal dynamic promotion scheme. Briefly stated, “[a]s shown in step 410, an employee for the Internet merchant first inputs data that is used by the inventive system to determine a sampling and optimization strategy.” *Id* at pp. 16, lines 22-24 (§ [0080]). This input data, discussed further in the specification at pp. 16, line 26-pp. 19, line 3 (§§ [0081]-[0088]), determines the type of experiment that will be conducted and may include, *inter alia*, a time and a sample size. *Id* at pp. 18, lines 2-4 (§ [0085]) (stating “[w]hen the pricing experiment is conducted continuously or at varying closely spaced intervals, the prices match the instantaneous price customers are willing to pay”); see also pp. 18, lines 11-12 (§ [0086]) (stating “[a] random fraction of the population is the sample for the experiment”). Thus, the invention is configured to receive various inputs from managers. Fig. 4, item 410.

“[T]he dynamic sampling engine 430 randomly samples potential customers according to the parameters defined at 410.” *Id* at pp. 19, lines 4-5 (§ [0089]). The experiment includes “...the Webserver distribut[ing] webpages 435 with the different promotions to the different customers in proportion to the quantities and for the period of time determined in step 410.” *Id* at pp. 19, lines 6-8 (§ [0089]). Accordingly, “[t]hese continuous dynamic experiments are used to measure the effectiveness of the promotions...” *Id* at pp. 19, lines 8-9 (§ [0089]). “Experimentation utilizing the dynamic sampling engine 430 may be repeated...until the experimentation becomes, practically speaking, continuous. Dynamic optimization, therefore, is a result of continuous

experimentation.” *Id* at pp. 19, lines 13-17 (§ [0090]); see also pp. 18, lines 2-4 (§ [0085]).

“Once the absolute number of customers, or the time period determined in step 410, has been sampled, the data gathered by the dynamic sampling engine 430 is used to compute the promotion point that maximizes the economic variable(s) of interest.” *Id* at pp. 20, lines 3-6 (§ [0093]). “The responses to various promotions are presented to the user at 460. In addition, the optimal promotion...is displayed.” *Id* at pp. 20, lines 19-21 (§ [0096]). Once the experiment has determined an optimal promotion, the Internet merchant may choose to employ it or not, as explained in the specification. *Id* at pp. at pp. 21, lines 14-17 (§ [0101]) (stating “[t]he Internet merchant configures the system to automatically change the price of the promotion if the optimal promotion determined by the system increases profit by 5% or more”).

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Appellant respectfully requests review of the following grounds of rejection:

- A. Whether claims 1-21 are unpatentable under 35 U.S.C. § 101.
- B. Whether claim 1 is unpatentable under the doctrine of non-statutory double patenting.
- C. Whether claims 1-21 are unpatentable under 35 U.S.C. § 103(a) over Robinson, U.S. Patent No. 5,918,014 (hereinafter “Robinson”).
- D. Whether claims 1-21 are unpatentable under 35 U.S.C. § 103(a) over Lipsky, U.S. Patent No. 7,031,932 (hereinafter “Lipsky”).

## **ARGUMENT**

### **A. Rejection under 35 U.S.C. 101 as being drawn to non-statutory subject matter.**

For purposes of this appeal, claims 1-21 are argued separately, where indicated, and the Board should separately consider the separately argued claims' patentability. Where grouped, the claims of the indicated group should stand or fall together.

### **Claims 1-14, and 17-21**

The claims 1-14 and 17-21 are argued as a group; accordingly, these claims should stand or fall together.

The statute dictates that “[w]hoever invents or discovers any new and useful process...may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Federal Circuit held that “the machine-or-transformation test, properly applied, is the governing test for determining patent eligibility of a process under § 101.” *In re Bilski*, 2007-1130; 545 F.3d 943, 956 (Fed. Cir. 2008). The court explained that:

[this test] is a two-branched inquiry; an applicant may show that a process satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. Certain considerations are applicable to analysis under either branch. First...the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity.

*Id* at 960-61 (citations omitted) (emphasis added).

Applicants respectfully submit that the claimed invention clearly satisfies the machine-or-transformation test. The Examiner's position appears to be that: (1) "...at least independent claim 1[is] related to mental processes, which is not patentable"; (2) "Internet website represents a nominal recitation..."; and (3) "the promotions...are not even run or displayed to visitors on the web site, which could have implied a switch in statutory class." *Office Action*, pp. 6 (July 1, 2008) (internal quotation marks omitted).

Applicants respectfully submit that the method is tied to a particular machine. Applicants respectfully submit that one could not "...present[] a plurality of varied promotions to different visitors within the sample according to the configuration data...", as required by claim 1, merely by using "mental processes" and without the use of a particular machine, because these are "visitors to the Internet website". Claim 1.

Moreover, the Examiner incorrectly ignores the language "thereafter displaying the optimal promotion to the Internet Merchant". Claim 1. The invention displays the optimal promotion to the Internet Merchant such that he or she can decide if it is appropriate for use. See *Specification* at pp. at pp. 21, lines 14-17 (§ [0101]). Thus, Applicants respectfully submit that the presenting and displaying steps tie the method to a particular machine and that the claimed invention is therefore drawn to statutory subject matter.

Applicants respectfully submit that claim 1 also satisfies the transformation branch of the inquiry. Claim 1 specifically requires, *inter alia*, "presenting a plurality of varied promotions to different visitors...thereafter displaying the optimal promotion to

the Internet Merchant”. Claim 1. Applicants respectfully submit that the presentation and display steps involve transformations that are integral to the overall method. Accordingly, Applicants respectfully submit that presenting promotions to the visitors of the website constitutes a transformation that qualifies the claim as patentable subject matter.

For the all of the above reasons the present rejections should be immediately reversed.

**Claims 15-16**

The claims 15-16 are argued as a group, accordingly, these claims should stand or fall together.

Applicants respectfully submit that claims 15 and 16 are directed to patentable subject matter under § 101. Claim 15 specifically requires, *inter alia*, “...automatically updating the website...” Claim 15. Applicants respectfully submit that to automatically update a website, one needs to employ a particular machine. Moreover, Applicants respectfully submit that in automatically updating a website, the transformation branch of the inquiry is also satisfied, i.e. transforming the (displayed) website by updating it. Claim 15.

For the all of the above reasons the present rejections should be immediately reversed.

**B. Rejection under Non-Statutory Double Patenting****1. Claim 1**

Claim 1 stands provisionally rejected on the ground of non-statutory double patenting over claim 1 of co-pending Application Serial No. 09/804,735. Claim 1 of co-pending Application Serial No. 09/804,735 has been cancelled, rendering the Examiner's rejections moot.

For the all of the above reasons the present rejections should be immediately reversed.

**C. Rejection under 35 U.S.C. § 103(a) over Robinson**

The claims are argued separately below and should be analyzed separately where indicated.

**1.1 The Examiner's Findings Are Not Supported by Substantial Evidence**

Regarding claims 1-21, Applicants respectfully submit that the Examiner has improperly relied on the use of "Official Notice" in the Office Action. *Office Action*, pp. 4-5 and 17-18. Findings of fact must be supported by "substantial evidence". See *In re Gartside*, 203 F.3d 1305, 1315 (Fed Cir. 200). Moreover, "[i]t is never appropriate to rely solely on common knowledge in the art without any evidentiary support in the record, as the principal evidence upon which the rejection was based." MPEP § 2144.03 (internal quotation marks omitted) (citing *In re Zurko*, 258 F.3d 1385 (Fed. Cir. 2001) (stating "the Board cannot simply reach conclusions based on its own understanding or experience-or on its assessment of what would be basic knowledge or common sense.



Rather the Board must point to some concrete evidence in the record to support [findings]’’)).

The Examiner readily admits that neither Robinson nor Lipsky expressly discloses that the advertiser’s configuration data specify a sample size of visitors and thus explicitly relies on “Official Notice”. *Office Action*, pp. 17-18; 22. The Examiner then appears to expand this “Official Notice” to encompass the claimed “configuration data.” *Id.* Specifically, the Examiner asserts that “...it is *well documented* in the art that an advertiser (Internet merchant) will submit to an advertising medium one or more desired criteria or specifications (configuration data) used to target or to display one or more advertisement or promotions.” *Id.* (emphasis added).

First, Applicants respectfully submit that it is apparent from the above quotation that the Examiner has disregarded the actual language of the claims. Second, Applicants respectfully submit that if the “Official Notice” is well documented, as the Examiner suggests, at least one example of such documentation should be placed in the record to provide Applicants with an opportunity to review it. This has been recognized by the Patent Office as necessary. MPEP § 2144.03 C (stating: “[i]f applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.”). Applicants previously raised this issue in the Pre-Appeal Brief Request for Review of October 1, 2008 but have not received any further indication of evidentiary support for the Examiner’s findings. *Pre-Appeal Brief Request for Review*, pp. 2, (October 1, 2008).

Moreover, the Examiner's "Official Notice" is utilized in rejecting all claims and appears directed towards (at least a part of) the "configuration data", which explicitly appears in three of the five steps of independent claim 1 and in certain dependent claims. Claim 18 explicitly requires "...randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in an experiment..." Claim 18. Thus, Applicants respectfully submit that the "Official Notice" is utilized as principal evidence upon which the rejection is based and the Examiner has not supported the finding with substantial evidence in the record. Accordingly, Applicants respectfully submit that the "Official Notice" is improper.

Additionally, Applicants respectfully submit that another finding of the Examiner is not supported by substantial evidence. Applicants respectfully submit that nowhere do Robinson or Lipsky teach or suggest "...dynamically determining an optimal promotion using real-time analysis of the sampling data..." Claims 1 and 8. It is unclear to Applicants whether the Examiner has a particular portion of the references that is thought to provide this teaching; however, Applicants respectfully note that the Examiner again inflects personal opinion, without any explicit citation or evidentiary support, into the Office Action, *inter alia*, at pp. 4-5. To wit, the Examiner asserts that:

...the notion that the optimal experiment is determined in real-time appears to be more complicated than the Applicant may have anticipated. In practice, collecting responses to displayed ads from a sample of 6,000.00-10,000.00 [*sic*] visitors, for example, to thereby determine an optimal promotion/experiment/ad may take minutes, hours or even days.

*Id.* As is readily apparent, this is not even what the independent claims recite. Thus, Applicants are unclear as to the applicability of this finding.

Additionally, even if this finding were applicable to the claim language, Applicants respectfully disagree with the accuracy of this finding and respectfully object to its application to the claims because it is completely devoid of support in the record and therefore lacks substantial evidentiary support, as required. It is not readily apparent to Applicants what, if any, evidentiary source this assertion can be attributed to. Applicants take this to mean that the Examiner is utilizing some form of official notice to find that it is not possible to perform the claimed method, as the Examiner has pointed to no evidence to back his assertion.

In this regard, Applicants note that the specification clearly provides adequate support for the claimed methods. The specification, *inter alia*, states that “[t]he...method...of the present invention utilize[s] limited sampling to determine real-time market sensitivity. This sampling provides data that can be used to create a real-time model that is analyzed to determine optimal values for many key market variables, such as price, promotions...” *Specification* at pp. 7, lines 5-8 (¶ [0035]). Moreover, the specification makes clear what is intended by “dynamic optimization” by explicitly stating “[e]xperimentation utilizing the dynamic sampling engine 430 may be repeated...until the experimentation becomes, practically speaking, continuous. Dynamic optimization, therefore, is a result of continuous experimentation.” *Id* at pp. 19, lines 13-17 (¶ [0090]); see also pp. 18, lines 2-4 (¶ [0085]).

Still further, Applicants respectfully submit that, contrary to the Examiner’s assertions, real-time transaction information is available for analysis using modern computing systems. *Specification*, pp. 4, lines 8-15 (¶ [0011]) (stating “The Internet is a

dynamic marketplace. As e-commerce becomes a dominant force, the ability to dynamically adjust to and exploit changes in the Internet marketplace becomes critical. *An enormous amount of detailed, disaggregate information is being routinely captured during Internet transactions. The ability to gather real-time information on transactions conducted on the Internet means that Internet merchants could use the information to dynamically update their websites to take maximum advantage of market conditions. In particular, real-time transaction information opens up the possibility of dynamic promotions and marketing*” (emphasis added)).

Accordingly, Applicants respectfully submit that this claim language must be given appropriate consideration, i.e. the references must teach the claim limitation “...dynamically determining an optimal promotion using real-time analysis of the sampling data...” Claim 1. Applicants respectfully submit that the Examiner has not pointed to any evidence that suggests this.

For the all of the above reasons the present rejections should be immediately reversed.

## **1.2 The invention is not obvious in view of Robinson**

### **Claims 1-6 and 9-21**

Claims 1-6 and 9-21 are argued as a group and should stand or fall together.

Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness. To make a *prima facie* case of obviousness under 35 U.S.C. §

103(a), the Examiner is required to find a suggestion of all limitations of a claim in the prior art. *Ex parte H. Garrett Wada et al.*, pp. 7, Appeal No. 2007-3733 (BPAI January 14, 2008) (citations and quotations omitted) (reversing Examiner's obviousness rejection). Moreover, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.* Applicants respectfully submit that Robinson fails to teach or suggest all the claim limitations.

In addition to the shortcomings of the Office Action regarding the use of official notice, noted above in Section C 1.1 and incorporated by reference here, Applicants respectfully submit the following.

Applicants respectfully submit that Robinson teaches a different method from that of the instant claims. As best understood, Robinson leverages the ability "to show different ads to different people who are simultaneously viewing the same content" (save the different ads) because "people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future." *Robinson*, Abstract. Thus, the thrust of Robinson's teaching is to track an individual's behavior to determine the appropriate community to which the individual belongs, then "[a]ds are presented to the subject base on his community..." *Id.*

Of particular interest to the Examiner in the present case is an ancillary issue that Robinson must naturally resolve in order to implement the invention. To wit, a new ad must be given a trial in order to determine which, if any, communities will be attracted to it, prior to applying automated collaborative filtering (ACF). *Robinson*, col. 18, line 60-col. 19, line 26. The Examiner appears to conclude that the "training" of a new ad in

Robinson, together with various other teachings found throughout, suggests Applicants' claimed invention. *Office Action*, pp. 4-5 and 10-18. Applicants respectfully disagree.

Specifically, Robinson proposes a "training period" for the new ad in which the new ad is randomly shown (since it cannot yet be targeted to a particular community) and data is collected regarding which community is interested in it. *Robinson*, at col. 19, lines 25-16. The general idea being that once a community's response to the ad is known, the (formerly) new ad can be used for comparison to other ads (which also have historical data available), ACF techniques can be applied, and the most suitable ad for a subsequent user from that community can be offered to the user. Noticeably absent from Robinson is any teaching or suggestion that a plurality of promotions should be shown to a sample population to dynamically determine which is optimal for the current market.

Applicants respectfully submit that the teachings of Robinson in stark contrast to the claimed invention. For example, claim 1 recites, *inter alia*:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises: a sample size of visitors to the Internet website who are to participate in an experiment, and time-related information concerning the experiment; (b) *randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the experiment according to the configuration data*; (c) running the experiment according to the configuration data on the randomly chosen sample of visitors to produce sampling data, *wherein the experiment comprises: presenting a plurality of varied promotions to different visitors within the sample according to the configuration data; and measuring the effectiveness of the plurality of varied promotions on the sample*; (d) *dynamically determining an optimal promotion using real-time analysis of the sampling data from the experiment*, wherein the optimal promotion optimizes at least one economic variable selected from a group of economic variables; and (e) thereafter displaying the optimal promotion to the Internet merchant.

Claim 1 (emphasis added). As is apparent from the quoted claim language, the instant invention performs experimentation with a plurality of ads on a sample of visitors.

Accordingly, Applicants respectfully submit that Robinson fails to teach or suggest the claimed limitations.

It should be noted that although claim 18 does not explicitly require “configuration data”, it does specifically require “randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in an experiment...”, which, as above, Applicants respectfully submit Robinson fails to teach or suggest.

For the all of the above reasons the present rejections should be immediately reversed.

### **Claim 7**

Claim 7 is argued separately and its patentability should be considered separately.

As an initial matter, it is not immediately clear to Applicants which portion of Robinson the Examiner asserts teaches or suggests the limitations of claim 7. Nor is it clear if the Examiner considers this a portion of the “configuration data” susceptible to official notice. Accordingly, the arguments regarding official notice appearing in Section C 1.1 and the arguments regarding claims 1-6 and 9-21 are incorporated by reference here.

Applicants respectfully submit that Robinson does not teach or suggest a method for receiving configuration data “wherein said configuration data includes a minimum

basket size for receiving a promotion.” Claim 7. Applicants respectfully submit that Robinson contains no such teaching or suggestion because Robinson does not contemplate taking into consideration what the user’s basket size is prior to determining if the user should receive a promotion.

For the all of the above reasons the present rejections should be immediately reversed.

### **Claim 8**

Claim 8 is argued separately and its patentability should be considered separately.

The arguments regarding claims 1-6 and 9-21 of Section C 1.2 are incorporated by reference here.

Applicants respectfully submit that Robinson fails to teach or suggest “...wherein the determining step comprises: when the optimal promotion is determined to lie between two tested promotions, the optimal promotion is allowed to lie between the two tested promotions, wherein an interpolating function is utilized to automatically determine the optimal promotion displayed to the Internet merchant.” Claim 8. Applicants respectfully submit that Robinson does not teach or suggest the above quoted claim limitation because, *inter alia*, no experimentation is being conducted so there are no “tested promotions”, no optimal promotion is dynamically determined at all, no optimal promotion is contemplated that can “lie between two tested promotions”, no optimal promotion is displayed to the Internet merchant, and no interpolating function is utilized to automatically determine the optimal promotion in the instant circumstance of claim 8.



Claim 8.

For the all of the above reasons the present rejections should be immediately reversed.

**D Rejection under 35 U.S.C. § 103(a) over Lipsky**

**1.1 The Examiner's Findings Are Not Supported by Substantial Evidence**

As explained above, Applicants respectfully submit that the Examiner has improperly utilized official notice and therefore certain findings are not supported by substantial evidence. Accordingly, Applicants incorporate by reference the remarks of Section C 1.1 here.

For the all of the above reasons the present rejections should be immediately reversed.

**Claims 1-7 and 9-21**

Claims 1-7 and 9-21 are argued as a group and should stand or fall together.

Applicants incorporate by reference the remarks regarding official notice appearing in Section D 1.1 here. In addition, Applicants respectfully submit the following.

Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness. To make a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the Examiner is required to find a suggestion of all limitations of a claim in the

prior art. *Ex parte H. Garrett Wada et al.*, pp. 7, Appeal No. 2007-3733 (BPAI January 14, 2008) (citations and quotations omitted) (reversing Examiner's obviousness rejection). Moreover, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.* Applicants respectfully submit that Lipsky fails to teach or suggest all the claim limitations.

As best understood, Lipsky tracks the performance of various advertising alternatives in one or more ad campaigns to determine their relative effectiveness via various measures. *Lipsky*, Abstract. While Lipsky updates the various alternatives, dynamically and automatically (see col. 2, 33-36), up to and including dropping all but the highest performing ad (see col. 7. lines 35-40), Lipsky does not contemplate sampling the visitors to a website for dynamic determination of an optimal promotion.

As acknowledged by the Examiner, "Lipsky does not expressly mention that the advertiser's configuration data specify a sample size of random users or visitors." *Office Action*, pp. 22. Applicants respectfully submit that this is because Lipsky does not teach or suggest conducting an experiment on a sample of the population to dynamically determine the optimal promotion, as per the instant claims. Claim 1. Rather, Lipsky implements one or more advertising campaigns (from various parties), applied to the entire customer population, then tracks and updates those campaigns according to an effective metric of choice. In other words, nowhere does Lipsky teach or suggest "randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in an experiment..." Claims 1 and 18. Accordingly, Applicants respectfully submit that Lipsky fails to teach or suggest all the claimed limitations.

It should be noted that although claim 18 does not explicitly require “configuration data”, it does specifically require “randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in an experiment...”, which as above, Applicants respectfully submit Lipsky fails to teach or suggest.

For the all of the above reasons the present rejections should be immediately reversed.

### **Claim 8**

Claim 8 is argued separately and its patentability should be considered separately.

The arguments regarding claims 1-7 and 9-21 of Section D 1.1 are incorporated by reference here.

Applicants respectfully submit that Lipsky fails to teach or suggest “...wherein the determining step comprises: when the optimal promotion is determined to lie between two tested promotions, the optimal promotion is allowed to lie between the two tested promotions, wherein an interpolating function is utilized to automatically determine the optimal promotion displayed to the Internet merchant.” Claim 8.

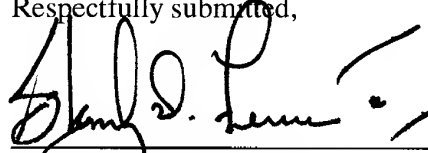
Applicants respectfully submit that Lipsky does not teach or suggest the above quoted claim limitation because, *inter alia*, no optimal promotion is contemplated that can “lie between two tested promotions”, no optimal promotion is displayed to the Internet merchant, and no interpolating function is utilized to automatically determine the optimal promotion in the instant circumstance of claim 8. Claim 8.

For the all of the above reasons the present rejections should be immediately reversed.

**CONCLUSION**

For the aforementioned reasons, it is respectfully submitted that the instant application, including claims 1-21, is presently in condition for allowance; therefore, it is earnestly solicited that the present rejections now considered on appeal be reversed and the claims allowed to issue.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stanley D. Ference III", written over a horizontal line.

Stanley D. Ference III  
Registration No. 33,879

**Customer No. 35195**  
FERENCE & ASSOCIATES  
409 Broad Street  
Pittsburgh, Pennsylvania 15143  
(412) 741-8400  
(412) 741-9292 - Facsimile

Attorneys for Applicants

**CLAIMS APPENDIX**

1. A method of dynamically determining an optimal promotion to be offered on an Internet website operated by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises:

a sample size of visitors to the Internet website who are to participate in an experiment, and

time-related information concerning the experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the experiment according to the configuration data;

(c) running the experiment according to the configuration data on the randomly chosen sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied promotions to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied promotions on the sample;

(d) dynamically determining an optimal promotion using real-time analysis of the sampling data from the experiment, wherein the optimal promotion optimizes at least one economic variable selected from a group of economic variables; and

(e) thereafter displaying the optimal promotion to the Internet merchant.

2. The method of claim 1, wherein said at least one economic variable selected from a group of economic variables comprises an economic variable of current interest to the Internet merchant.

3. The method of claim 1, where said configuration data includes potential promotions to be offered to the sampled visitors in step (c), and further wherein if visitors that are not chosen to be within the sample are to receive a promotion, the visitors that are not chosen to be within the sample receive a standard promotion.

4. The method of claim 1, wherein said configuration data includes whether the sampling is to be performed continuously or at discrete intervals.

5. The method of claim 1, wherein said configuration data includes data for segmenting the visitors into clusters.

6. The method of claim 1, wherein said configuration data includes a minimum threshold for automatically propagating an optimal promotion.

7. The method of claim 1, wherein said configuration data includes a minimum basket size for receiving a promotion.

8. The method of claim 1, wherein the determining step further comprises: when the optimal promotion is determined to lie between two tested promotions, the optimal promotion is allowed to lie between the two tested promotions, wherein an interpolating function is utilized to automatically determine the optimal promotion displayed to the Internet merchant.

9. The method of claim 1, wherein visitors to the website are grouped, and each group is sampled separately.

10. The method of claim 9, wherein an optimal promotion is determined for each group.

11. The method of claim 10, additionally comprising updating the website such that a visitor is offered the optimal promotion determined in step (c) according to the visitor's group.

12. The method of claim 10, wherein groups are determined based upon prior purchasing behavior.

13. The method of claim 10, wherein groups are determined based upon demographic characteristics.

14. The method of claim 1, wherein step (d) comprises determining a promotion that optimizes profit.



15. The method of claim 1, additionally comprising:

(f) automatically updating the website to use the optimal promotion determined in step (d).

16. The method of claim 1, additionally comprising:

(f) automatically updating the website to use the optimal promotion determined in step (d) if the optimal promotion meets a minimum threshold.

17. The method of claim 16, wherein said minimum threshold is that the optimal promotion determined in step (d) is a predetermined percentage better than a currently offered promotion for the product.

18. A method of dynamically determining an optimal promotion to be offered on an Internet website operated by an Internet merchant, comprising:

(a) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in an experiment;

(b) running the experiment on the randomly chosen sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied promotions to different visitors within the sample; and

measuring the effectiveness of the plurality of varied promotions on the sample;

(c) dynamically determining an optimal promotion using real-time analysis of the sampling data from the experiment, wherein the optimal promotion optimizes at least one economic variable selected from a group of economic variables; and

(d) thereafter displaying the optimal promotion to the Internet merchant.

19. The method of claim 1, wherein in step (d) the optimized economic variable is market share.

20. The method of claim 1, wherein in step (d) the optimized economic variable is customer satisfaction.

21. The method of claim 1, wherein in step (d) the optimized economic variable is a resource selected from the group consisting essential of shipping resources and manufacturing resources.

**EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.